

REMARKS

Applicant again respectfully **traverses** the rejection of claims 7, 5 and 6 under 35 U.S.C. § 103(a) as being unpatentable over Baum (WO '992) in view of Cesaro '358, and the rejection of claims 2, 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Baum in view of Cesaro in view of Wong (WO '790).

The Examiner's rejections and comments in support thereof are identical to those in the previous Office Action. What is new is the Examiner's "Response to Arguments" in which the Examiner states:

The applicant argues that the secondary reference Cesaro does not disclose a method of replacing the radio relay with an aircraft.

The examiner respectfully disagrees and draws the applicant's attention to the Cesaro reference col. 1, lines 14-18 where he teaches a method of removing the relay system from the group and replacing that with airborne apparatus. Therefore the combination of Baum and Cesaro reads on the limitations of the independent claim 7.

However, claim 7 contains the critical and very important limitations,

replacing said existing radio relay..., [and]

taking said aircraft (1) to an altitude and a position such that said transceiver means (15) lies in the same direction, relative to at least one user (11, 12) of said telecommunications network (RT), as said replaced relay (10), with operation between said transceiver means (15) and said user (11, 12) being performed via an already existing interface without modification thereof, thereby avoiding the need to modify the pointing direction of an antenna of said user.

While Cesaro may disclose the use of an airborne relay system **instead** of a ground-based relay system in order to increase the coverage of the associated antennas, Cesaro (and Baum and/or Wong) does not teach or suggest Applicant's inventive concept of **replacing an existing** radio relay with an airborne relay which is taken "to an altitude and position such that said transceiver means (15) lies in the same direction, relative to at least one user (11, 12) of said telecommunications network (RT), as said replaced relay (10), with operation between said transceiver means (15) and said user (11, 12) being performed via an already existing interface without modification thereof, thereby avoiding the need to modify the pointing direction of an antenna of said user".

Furthermore, the Examiner admits that Baum "does not explicitly disclose that the radio relay on the ground is replaced by said aircraft".

However, as already explained on page 2 of Applicant's specification:

Nevertheless, in spite of that, the high altitude aircraft solutions that have been envisaged or proposed are unfeasible, both economically and even technically. In particular:

- because of their high weight, and thus significant weight/power ratio, the aircraft that have been proposed are generally too heavy to remain at high altitude on a permanent basis, in particular, the energy supplied by batteries and possibly by solar cells often remains inadequate;
- in addition, the energy storage capacities proposed are generally insufficient to provide power over night; and
- other energy sources, such as transmitting energy by microwaves from the ground, are too complex and expensive and they are also harmful for the environment.

On page 2, paragraph 1, in attempting to read Applicant's claim 7 on Baum, the Examiner **only partially** quotes Applicant's claim 7 limitation, wherein said aircraft is taken to "an altitude and a position such that said transceiver means lies in the same [?] direction relative to said at least one user of said telecommunication network". This **partial** quotation makes no sense, as there is no reference for "the same direction". Applicant's claim 7 actually completes the Examiner's partial quotation by the further limitation, "as said replaced relay". Since Baum does not disclose or suggest **any replacing** of any relay (as admitted by the Examiner in the penultimate paragraph on page 2 of the Office Action), it is clear that Baum cannot teach, or even suggest, Applicant's claim limitation: "**replacing** said **existing** radio relay by an aircraft [taken] to an altitude and a position such that said transceiver means lies in the **same** direction, relative to at least one user..., **as said replaced relay**..., thereby avoiding...".

Thus, Applicant respectfully submits that the subject matter of independent parent claim 7 is quite different from the disclosure of Cesaro col. 1, lines 13-18 **in combination** with Baum. As a matter of fact, all that Cesaro teaches is "removing" antenna systems from the ground for "covering a relatively larger area". The combined disclosures of these two references do not teach or suggest replacing an existing radio relay with one on an aircraft positioned "solely at high altitude" and "such that said transceiver means (15) lies in the same direction...as said replaced relay...".

In **contrast**, claim 7 requires "replacing a radio relay". As explained in Applicant's specification at page 5, lines 17-23:

The user then has no need to modify either the interface or even the pointing of the antenna. This makes it possible to replace radio relay networks based on the ground or in space easily, and in addition to do so without modifying the interfaces of user terminals, which is particularly advantageous particularly in terms of cost.

Further, another advantage is the possibility of ensuring service continuity when the telecommunication network suffers from disasters and a relay no longer works (following a natural disaster, a terrorist attack, etc).

Thus, Applicant respectfully submits that the **teachings** of Baum and Cesaro would not have rendered obvious, to a person of ordinary skill in the relevant art, the subject matter of claim 7 and each of its dependent claims 5 and 6, as the problem solved by the subject matter of each of these claims is not recognized by these teachings.

Therefore, and notwithstanding the Examiner's assertion to the contrary, Applicant respectfully submits that it would **not** have been obvious to one of ordinary skill in the art, at the time the invention was made, to use airborne apparatus as taught by Cesaro in Baum's invention in order to replace the ground based radio relay system by the airborne apparatus thus reducing radiation from ground based towers or masts.

In the rejection of claims 2, 3 and 4, the Examiner cites Wong merely to show "a method of using a new propulsion system to overcome the inefficiencies of the conventional propellers. Further, Wong teaches a method where the engine includes an electrode and the emitted electrons are accelerated by the surrounding electric field forming plasma of electrons, which is then used to propel the aircraft".

Even assuming, *arguendo*, that the Examiner's characterization of Wong's disclosure is accurate, in view of the above-noted deficiency in the basic Baum/Cesaro combination, Applicant respectfully submits that the subject matter of claim 2 would not have been obvious from Wong's teaching when combined with the teachings of Baum and Cesaro.

The same is true for claim 3 relative to Wong's presumed teaching of "the use of solar generator in the aircraft which is cooled by convection", and also for claim 4 relative to Wong's presumed teaching of "the use of at least one storage battery in the aircraft".

New claim 9 recites features of a preferred embodiment, and is supported in Applicant's specification at least at pages 1 and 7.

In summary, then, Applicant respectfully submits that the subject matter, taken as a whole, of each of claims 2-7 and 9 would not have been obvious from the combined **teachings** of Baum, Cesaro (newly cited) and Wong, and respectfully requests the Examiner to reconsider and withdraw the above rejections, and to find the application to be in condition for allowance with all of claims 2-7 and 9; however, if for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to **call the undersigned attorney** to discuss any unresolved issues and to expedite the disposition of the application.

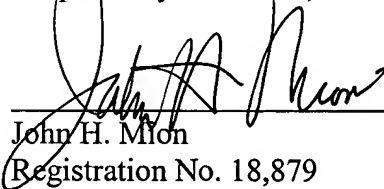
The undersigned attorney acknowledges Examiner Sharma's return telephone call on October 11, 2005 confirming that the Office Action is non-final as indicated on the Office Action Summary (Form PTOL-326).

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLN. NO. 10/009,573

If for any reason the Examiner feels that the application is not now in condition for allowance, the Examiner is respectfully requested to **call the undersigned attorney** to discuss any unresolved issues and to expedite the disposition of the application.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this application, and any required fee for such extension is to be charged to Deposit Account No. 19-4880. The Commissioner is also authorized to charge any additional fees under 37 C.F.R. § 1.16 and/or § 1.17 necessary to keep this application pending in the Patent and Trademark Office or credit any overpayment to said Deposit Account No. 19-4880.

Respectfully submitted,



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